

Notes from the 04/04/06 MI BPM Upgrade Meeting  
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These notes can be found in Beams docDB #1526.

Agenda as announced:

- Project Announcements
- Main Injector Status - Dave C.
- Measurements around MI with injected signals
  - Peter, Marv, Bob D., Bob W.
- Hardware status:
  - Transition Board: bids, filters, delivery, checkout and testing.
  - Transition Board I/O status
  - Timing Board
  - Cables, crates, backplanes, Optilogic, other.
- Software status:
  - Front-end software
  - Online software
- Installation and Commissioning
- Validation
- AOB

## 0. Project Announcements

- Rob Kutschke gave a nice talk at the All Experimenters Meeting on Monday April 3. The final version of the talk can be found in beams-doc-2217-v3.
- Bob Webber mentioned that The UDP interface for the DAWN crates is functional and we should use it. Therefore, there is no need to purchase Optilogic hardware.

## 1. MI Status - Dave Capista

- Dave gave an update on the MI shutdown activities. The MI8 line is coming together. Four of the new quads are in various stages of installation. There are some vacuum leaks being worked on for some of them.
- Overall the work is on schedule. Still plan for completion May 27.

## 2. Measurements in MI40 with injected signals

- Peter, Marv, Bob D., Bob W.
- Bob Webber is finishing the document that describes the measurements that were made and gives the values.

- The front-end/online systems will need to make corrections (either in amplitude or in position) that will be different for 53 MHz and 2.5 MHz measurements. We agreed that the 2.5 MHz will need no correction for A and B differential attenuation. No decision of whether to correct A/B or to add an offset.

### 3. Hardware status:

Transition Board: bids, filters, delivery, checkout and testing.

Transition Board I/O status

Timing Board

Cables, crates, backplanes, Optilogic, other.

- Stefano gave an update on the Transition Board Control module. Work is a little behind schedule, but they are trying to make up the time and get back on schedule so the first prototype board can be available April 24.

Bob Forster's report on hardware acquisition:

### MI-BPM Status

April 4, 2006

#### Transition Module Assembly

- PO Total = \$17,042.52 to Lace Technologies.
- Qty=72, Req#184529, PO#568055, Bid Package.
- Assembly including Fabrication of Front Panels
- unit price \$201.23 plus 3 extra Front Panels
- Expected Delivery :
  - o First Two - Weds 4/5(to be confirmed)(no Front Panels)
  - o Remainder - (to be determined, based on tests of 1st 2)

#### System Cables

- PO Total = \$34,413.40 to Casco.
- Qty=(Lots), Req#183724, PO#566784, Sole Source.
- Expected Delivery : <complete>. Awaiting testing.
- A few failures from the first batch still to be returned along with whatever second batch failures will be found.

#### Analog VME Chassis J3 Backplanes

- PO Total = \$5,830 to Hybricon.
  - Qty=11, Req#186118, PO#568474, Sole Source.
  - Unit price: \$530 (11 \* \$530 = \$5,830)
- (comment: the backplanes in-stock when I wrote the Req were gone when this PO was approved and placed.)
- Expected Ship Date Weds, 19-Apr-06 (by phone from Hybricon)

- Expected Delivery Date Tues, 25-Apr-06 (Extrapolation)

#### Digital VME Chassis

- PO Total = \$67,292 to DAWN.
- Qty=16, Req#182408, PO#566244, Bid Package.
- Unit price: \$4,205.75 ( $16 * \$4,205.75 = \$67,292$ )
- Expected Delivery : <complete>.
- Comment: Charlie Briegel says a firmware upgrade is needed to all the DAWN chassis since the newest UDP firmware works. There is NO NEED TO ORDER OPTILOGIC HARDWARE.

#### Air Dam Modules

- PO Total = \$5,148 to Elma
- Qty=300, Req#186116, PO#568441, Sole Source
- Unit price: \$17.16 ( $300 * \$17.16 = \$5,148$ )
- Expected Delivery: 14-Apr-06 (from PO)

- The above is all good news, especially the transition boards. Andrea and Manfred will be ready to test the first two boards when they come in. One of Tim's people will sit in. If the boards are acceptable the remaining 70 boards will be fabricated.

- A test procedure for those 70 boards is being developed by Andrea and should be ready in about 2 weeks.

- Manfred needs the crimp tools that were loaned to CASCO for the cable assembly.

#### 4. Software status:

Front-end software  
Online software

- Two more alarms have been defined. A total of 7 are available and this code is running at MI40.

- Still waiting for Alberto and Dave to complete reading and giving feedback for the software specification.

#### 5. Validation

- Rob is working on analyzing some of the test bench data to determine BPM to BPM variability. Will have something to say next time.

#### 6. AOB

- Short discussion of kicker noise issues. No conclusion yet about how the kickers affect the BPM measurements and what we are going to do about it.